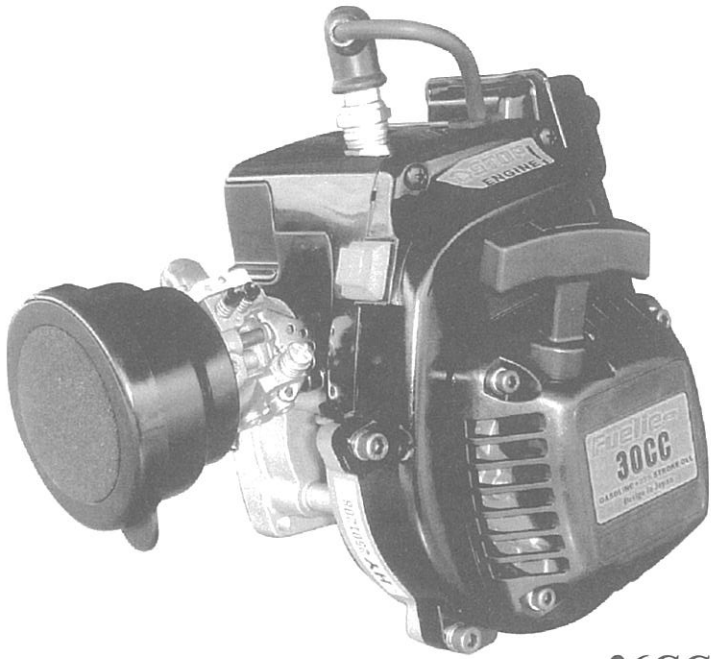
USER'S MANUAL

1/5TH GASOLINE POWERED HOBBY ENGINE
HY26CC/30CC/36CC



26CC
30CC
36CC

Warning:

-This gas powered engine is not a toy. Incorrect operation would cause a serious injury and damage to property.

-Read and understand this manual carefully before operating your engine. Being very familiar with safe use is necessary before handling this engine.

20130724

ROHS

Introduction

Dear Customer:

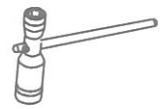
Thank you for purchase our 1E28-34F , 1E28-36F,and 1E32-36F hobby gasoline engine.

We are keen to provide good service for you. Being familiar with the safety/usage information is essential. For better performance, please read and understand all instructions before using/handling the engine. Please leave this manual handy as it is confusing to follow without it.

For performance improvements, this manual is subject to revise without prior notification. Some images/information might vary from the ones in the manual. If it is the case, we do apologize for any inconvenience caused.

Additional Items Needed For Your Engine

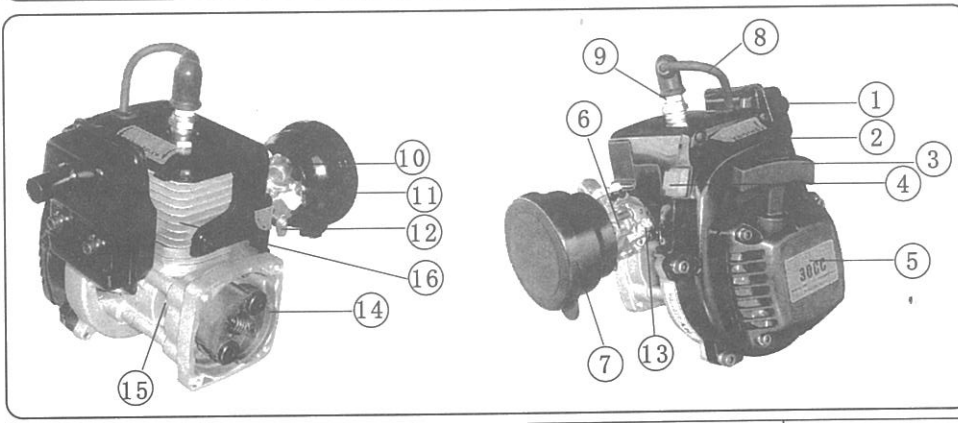
25062
Lecythus



25059
Wrench1

25060
Grasping MA

25061
Wrench2



1.Muffler	2.Flywheel guard	3.Starting Handle	4.Stop Button	5.Generating System
6.Carburetor	7.Air Filter	8.Igniter	9.Glow Plug	10.Oil Pump
11. Outlet Pipe	12. Inlet Pipe	13. Choke Valve Handle	14. Clutch	15.Crankcase
16.Cylinder				

Technical Data Of Gasoline Engine

Item	1E34F 26CC	1E36F 30CC	1E38F 36CC
Structure Type	Single-cylinder, two-stroke, wind cooling	Single-cylinder, two-stroke, wind cooling	Single-cylinder, two-stroke, wind cooling
Displacement (ml.)	25.4	30.4	36.3
Cylinder diameter*Stroke	28*34(mm)	28*36(mm)	32*38(mm)
Max. Output /rpm (kw/r/min)	0.85/12000	1.1/12000	1.6/12000
Low Idling Speed (r/min)	3800±150	3800±150	3800±150
Maximum Torque /Maximum Speed (N.m/r/min)	1.4/10000	1.7/10000	2.1/10000
Minimum Specific Fuel Consumption (g/kw.h)	≤820	≤840	≤970
Gasoline Applied	90-93# Gasoline	90-93# Gasoline	90-93# Gasoline
Lubricant Applied	Specially for two-stroke gasoline engine	Specially for two-stroke gasoline engine	Specially for two-stroke gasoline engine
Mixture Ratio (ratio of gasoline and engine oil in volume)	For the initial 8 hours, the ratio is around $1/20^{th}$-$1/25^{th}$, and then reduce it down to $1/30^{th}$.	For the initial 8 hours, the ratio is around $1/20^{th}$-$1/25^{th}$, and then reduce it down to $1/30^{th}$.	For the initial 8 hours, the ratio is around $1/20^{th}$-$1/25^{th}$, and then reduce it down to $1/30^{th}$.
Glow Plug Gap	0.5-0.7	0.5-0.7	0.5-0.7
Carburetor	Diaphragm Type	Diaphragm Type	Diaphragm Type
Ignition Method	Electrified	Electrified	Electrified
Direction of Rotation	Left (view from power outport)	Left (view from power outport)	Left (view from power outport)
Net Weight (kg.)	2.1	2.1	2.1
Size (mm)	165*195*230	165*195*230	165*195*230
Operative Norm	JB/T5135.3-2001	JB/T5135.3-2001	JB/T5135.3-2001

A. General Warnings:

1.Verify all screws and nuts are firmly secured on the engine. Verify the engine with all wirings well-connected and a complete oil tubing.

2.Consider the engine to be securely installed to the car.

3.Provide a good air ventilation for engine against getting choked. Allow reliable clearance for engine to cool down shortly.

4.Double check oil tubes, all wirings after being installing. Failure to do so can cause malfunction of engine, even damage to engine.

B. Safety Information:

1.Keep away any source of heat/an open fire when re-fueling to the gas tank.

2.Verify no leaky details are found on the gas tank, the fuel tubing/tube joints.

3.Perform a proper manner to start the engine.

4.Always avert touching the muffler, the glow plug which can generate too much heat. Otherwise, it would cause burn.

5.Recommend to wear the uniform to handle with engine. Take care not to get your clothing (laps, ties, hand ornaments..) entangled with the projecting parts on the engine when working.

6.Take good care of everyone else standing by when you are starting the engine.

7.Hold the car securely before running the engine.

8.Pure gas is not recommended for start of engine.

Notification:

We can not have a trail control of our products to be properly used by operators. Any malfunction and/or damage will void our responsibilities.

C. To start the engine (We warmly recommended the engine starter to be used.)

1.Before starting the engine, fuel the gas tank with the gas mixture properly mixed in proportion in terms of the instructions in Page 2.

l Check if the engine is well secured on the car.

l Holding the car when starting the engine.

l Check there is no moving/juddering parts (such as the glow plug, the hood, wirings and /or connectors) on the engine.

l Turn on the transmitter then the receiver...

2.Press the oil pump on carburetor to allow fuel flow into carburetor.

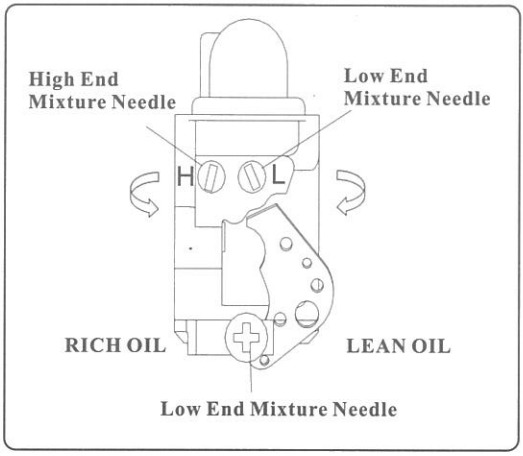
3.Close the choke valve , use the starter or pull starter to start the engine until ping sound is heard, and then open the choke valve.

4.The engine starts...

D. Breaking-in of engine

1. Recommended to be used for breaking-in of engine:
   l No.90-No.93 gasoline as the fuel l FC two-stroke gas engine oil as the lubricant
   According to volumetric ratio, measure a proper proportion of mixture.
   Initially, the proportion of 1/20th-1/25th of the mixture is recommended for engine to run for the first eight hours. Then, measure it down to 1/30th or so.
2. For the first four hours, never allow engine speed to run more than 5000 rpm. Then, the engine comes to normal working. (Note: the proportion of 1/20th - 1/25th of the mixture is for the first 4 hours and the proportion of 1/30th is for the second four hours.)
3. Never attempt to arbitrarily adjust the carburetor needle during breaking-in. The engine will run smoothly after breaking-in is performed.
4. Proper proportion of the mixture to be used is essential to perform a smooth breaking-in procedure and keep engine running in a good manner for long time as well.

E. Adjustment of carburetor



Every engine is securely tested and adjusted at factory. Normally, we do not recommend users to re-adjust the carburetor unless special demand.
Methods of adjustment:
-For lean oil measure, adjust the needle clockwise.
-For rich oil measure, adjust the needle counter-clockwise.
H: high end mixture needle
L: low end mixture needle
Cross Head Screw is the idle adjustment needle.

Conforming to instruction adjust these needles.
Properly run the engine before adjusting high/low end mixture needles.
Adjust high/low end mixture needles in phase keeping proper inflow of mixture.
Re-adjustment is required for optimum performance.
An improper inflow of mixture will compromise engine performance and/or cause an uneven running speed.

Therefore, re-adjust high/low end mixture needle until the engine run smoothly.

Not only optimum performance desires for engine speed at a considerate rpm, but it also requires smooth acceleration and/or deceleration for the engine without stalling.

Note: Incorrect adjustment for carburetor will cause a trail of problems:

1.Failure to start the engine.

2.Instable acceleration and/or deceleration

3. Engine is easy to stall.

F. Clearance adjustment (between the igniter silicon steel and the fly wheel magnet)

The normal clearance between the igniter silicon steel and the flywheel magnet is around 0.20mm-0.30mm. Oversize or undersize will affect performance of igniter and cause malfunction. Please make due adjustments conforming to the following instructions if it goes beyond the normal size.

-Unlock the two screws on the igniter, turn off the flywheel magnet to the other side.

-Insert one car or two cards(like personal card···) into the clearance, securely fix the igniter and the flywheel, and then lock the screws.

-Remove the card.

G. General information

-General usage/information

1.Always provide a proper proportion of fuel and lubricant for engine. Check if the clean fuel is used.

2.Permit the glow plug to work properly. Check if there are cracks or any phenomena of carbonization is found on the glow plug.

3.Verify all screws and nuts are firmly secured.

4.Check the electric igniter is properly installed and all wirings are firmly connected.

5.Verify there is no leakage on the joints. Check if the muffler is securely installed.

6.Check if the clutch is seriously fixed to the engine.

7.Check if the engine is firm.

8.Check there is no leakage on the oil pipe.

-Before using

1.Check if the cooling system have a good function.

2.Check if all screws and nuts are firmly secured.

3.Check all pipes and wirings are ready.

-Maintenance

1.Keep the engine surface clean. Always clean oil stains off after use.

2.Blow off the residual fuel and clean the oil pipe and the carburetor.

3.Pour the residual fuel out from the tank for use next time.

4.Remove the glow plug if the engine is not in use for a long period of time. Infuse the cylinder with 10-20 drops of FC lubricant oil.

5.Store the engine in a dry area with well-packed.

- When you fail to start the engine

1.Check if the tank is filled with fuel.

2.Pull the engine handle putting the glow plug head attached to the cylinder body or the muffler and see if it functions.

3.Remove the glow plug, put down the engine to check if the cylinder body is flooded and/or choked.

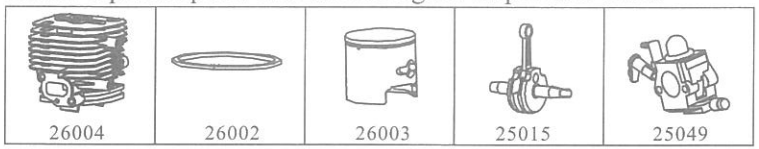
4.Check if the oil pipe is leaky and the carburetor is clogged.

5.Check if the fuel is smoothly flowing into the carburetor.

6.Check if all wirings / connectors are properly connected.

We offer a sincere help for intractable problems once you purchase our products. Defectiveness of constructive design is under warranty and we will do free servicing for this. Attempt to disassemble the product can damage it. Attempt to assemble our product with the parts from other factories and/or contrived repair without approval can void the warranty.

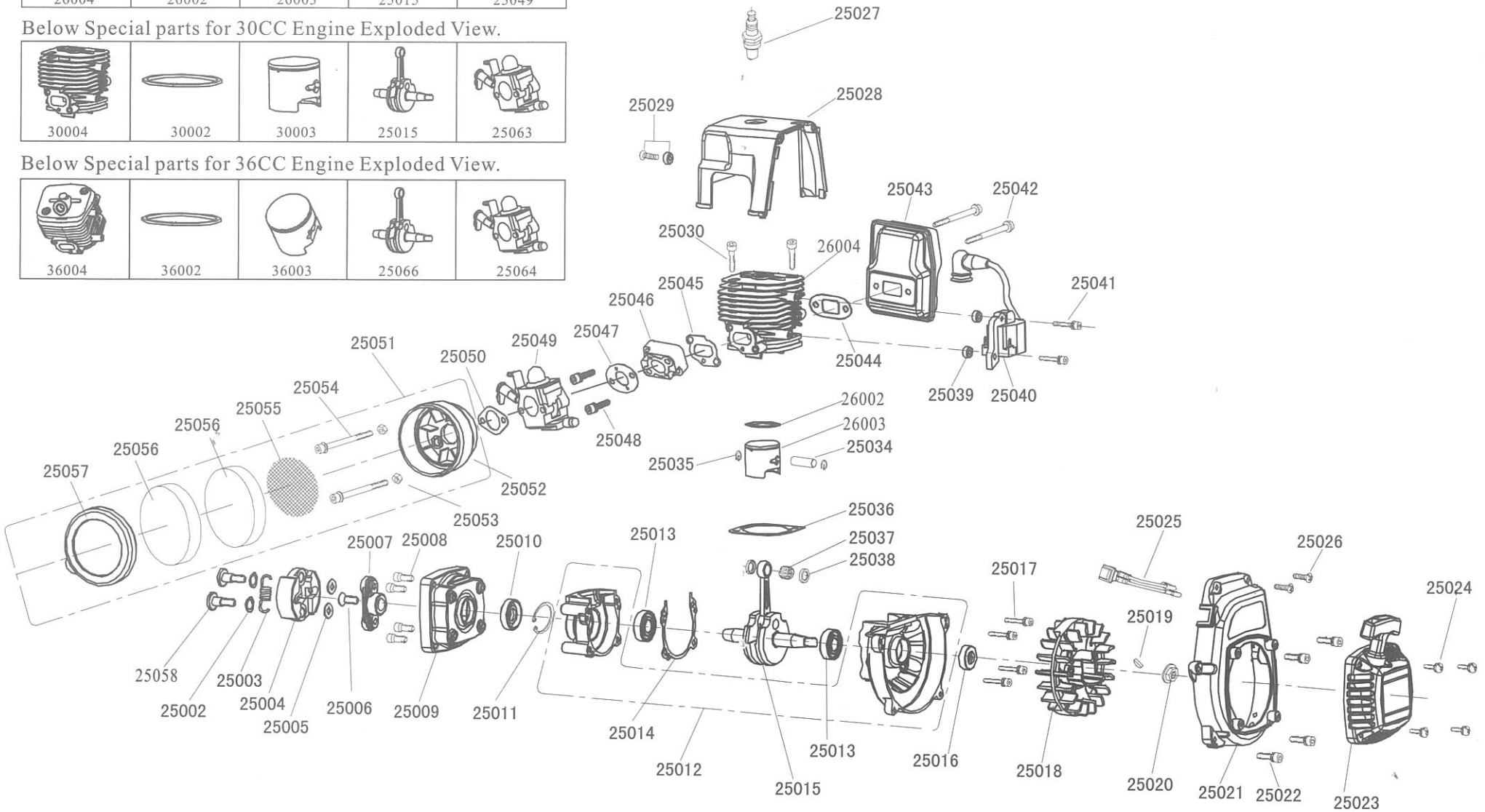
Below Special parts for 26CC Engine Exploded View.

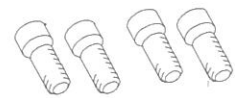
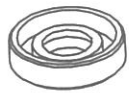
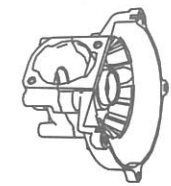


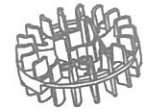
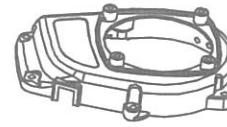
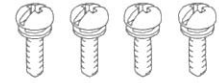
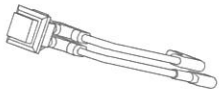
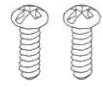
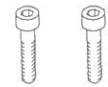
Below Special parts for 30CC Engine Exploded View.

Below Special parts for 36CC Engine Exploded View.

26CC&30CC&36CC Common Engine Exploded View



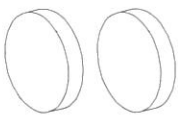
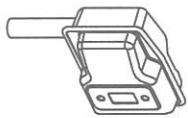
25058-Flange Screw M6*20 2P	25002-Washer 2P	25003-Spring 1P
25004-Gear Friction 1P	25005-Washer 2P	25006-Sunk Screw M6*17 1P
25007-Clutch Connector 1P	25008-Flange Screw M6*15 4P 	25009-Clutch Cover 1P
25010-Oil Seal 1P 	25011-Shim 1P	25012-Crankcase 1P 
25013-Ball Bearing 2P	25014-Crankcase Filling Piece 1P	25015-Crank Group 1P For 26CC/30CC Only

25016-Oil Seal 1P	25017-Flange Screw M5*25 4P	25018-Flywheel 1P 
25019-Half Month Key 1P	25020-Flange Nut 1P	25021-Gear Fan Cover 1P 
25022-Screw M5*20 4P	25023-Starter 1P	25024-Flange Screw M4*16 4P 
25025-Stop Switch 1P 	25026-Screw M4*16 2P 	25027-Glow Plug 1P
25028-Cylinder Complete 1P	25029-Screw M4*10 1P	25030-Flange Screw M5*20 2P 

26CC&30CC&36CC Common Parts

25067-Air Cleaner Foundation 1P	25068-The Open Pin 1P	25069-Air Cleaner Cover 1P
25034-Piston Pin 1P	25035-Circlip 2P	25036-Cylinder ring 1P
25037-Needle Bearing 1P	25038-Elastic ring 2P	25039-Gasket 2P
25040-Lgniter 1P	25041-Flange Screw M4*20 2P	25042-Flange screw M5*50 2P
25043-Damper 1P	25044-Damper Pad 1P	25045-Air Inlet Pad 1P

26CC&30CC&36CC Common Parts

25046-Branch Pipe 1P	25047-Carburetor Pad 1P	25048-Flange Screw M5*20 2P
25050-Filtration Pad 1P	25051-Air Cleaner 1P	25052-Air Cleaner Foundation 1P
25053-Nut 2P	25054-Flange Screw M5*55 2P	25055-Mesh 1P
25056-Sponge 2P 	25057-Ait Cleaner Cover 1P	25065-Damper 1P 
25066-Crank Group 1P For 36CC Only		

Parts For 26CC Engine

26004-Cylinder 1P	26002-Piston Curl 1P	26003-Piston 1P	25049-Carburetor 1P

Parts For 30CC Engine

30004-Cylinder 1P	30002-Piston Curl 1P	30003-Piston 1P	25063-Carburetor 1P

Parts For 36CC Engine

36004-Cylinder 1P	36002-Piston Curl 1P	36003-Piston 1P	25064-Carburetor 1P